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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,444	02/26/2001	Masami Kanamaru	203370USOX	7166

22850 7590 11/05/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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LEE, RIP A

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 11/05/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/784,444

Applicant(s)

KANAMARU ET AL.

Examiner

Rip A. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 12-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

This office action follows a response filed on July 17, 2003. A supplemental amendment was received on August 13, 2003. Applicants have amended claims 1, 15, and 16 to correct matters of form.

#### ***Information Disclosure Statement***

1. The information disclosure statement filed February 24, 2003 was not received. Examiner requests Applicants to send a complimentary copy in their response to this office action.

#### ***Election/Restrictions***

2. Applicant's election with traverse of claims 1, 2, 12-15, 17 and 18 in Paper No. 11 is acknowledged. Upon further review of the restriction requirement, it has been found that grouping of claims is incorrect and that the restriction is not necessary. Consequently, the restriction requirement set forth in the previous office action (Paper No. 9) has been withdrawn.

Claims 1, 2 and 2-18 remain for prosecution.

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claim has been amended to exclude bridged indenyl complexes which bear substituents in the 4- and 7-positions. Support for this exclusionary claim feature could not be found in Applicant's original presentation of the invention.

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***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 2, 12-14, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-130807 to Kanamaru *et al.* for the same reasons set forth in the previous office action.

Briefly, Kanamaru *et al.* teaches a method for preparing propylene homopolymer and propylene copolymer using metallocenes recited in the present claims. Vapor phase polymerization is contemplated, and the inventors instruct that liquid monomer may be used as solvent. Polymers of the invention have *mmmm* value of greater than 60 mole %, and the Table on page 17 displays samples with *mmmm* in the range of 66.8 to 81 mole %. The melting point of these polymers ranges from 113-135 °C. The inventors have not measured the heat of fusion or the intrinsic viscosity of the polymers. This data is therefore absent in the text.

Since the method of preparation of the polymers is the same as that claimed, including use of the metallocenes that are described in the present claims, one having skill in the art would find it obvious that the prior art polymers would exhibit the properties recited in the present claims. This is especially true in view of the fact that the microstructural features of the prior art polymer are essentially the same as that claimed. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

8. Claims 1, 2, 12-14, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,339,135 to Kashiwamura *et al.*

The prior art of Kashiwamura *et al.* teaches double crosslinking transition metal compounds which are essentially the same as those claimed in present claim 16 (see entire document, claim 1). These are combined with ionic compounds, resulting in the formation of active polymerization catalysts (col. 17, lines 13-65). Olefins include  $\alpha$ -olefins having 3 (*i.e.*, propylene) to 20 carbon atoms and mixtures thereof (col. 22, line 57). Monomer such as  $\alpha$ -olefins may be used as solvent (col. 22, line 38). Gas phase polymerization is highly recommended (col. 22, line 12).

The reference is silent with respect to the physical attributes of the polypropylene polymer prepared from the catalysts described therein. However, in view of the fact that the method of making polymer is essentially the same as that claimed, one having ordinary skill in the art would have found it obvious that the polypropylene product would exhibit essentially the

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same properties. Since the PTO can not perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

***Response to Arguments***


9. Applicants traverse the rejection of claims 1, 2, 12-14, 15, 17, and 18 under 35 U.S.C. 103(a) as being unpatentable over JP 11-130807 to Kanamaru *et al.* Applicant's arguments filed have been considered fully, but they are not persuasive in view of the fact that no recitation could be found in Applicant's disclosure which mandates use of catalysts containing bridged indenyl complexes with no substituent on the 4-and 7-positions (see paragraph 4).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (703)306-0094. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (703)308-2450. The fax phone number for the organization where this application or proceeding is assigned is (703)746-7064. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

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October 29, 2003

  
HELEN L. PEZZUTO  
PRIMARY EXAMINER